

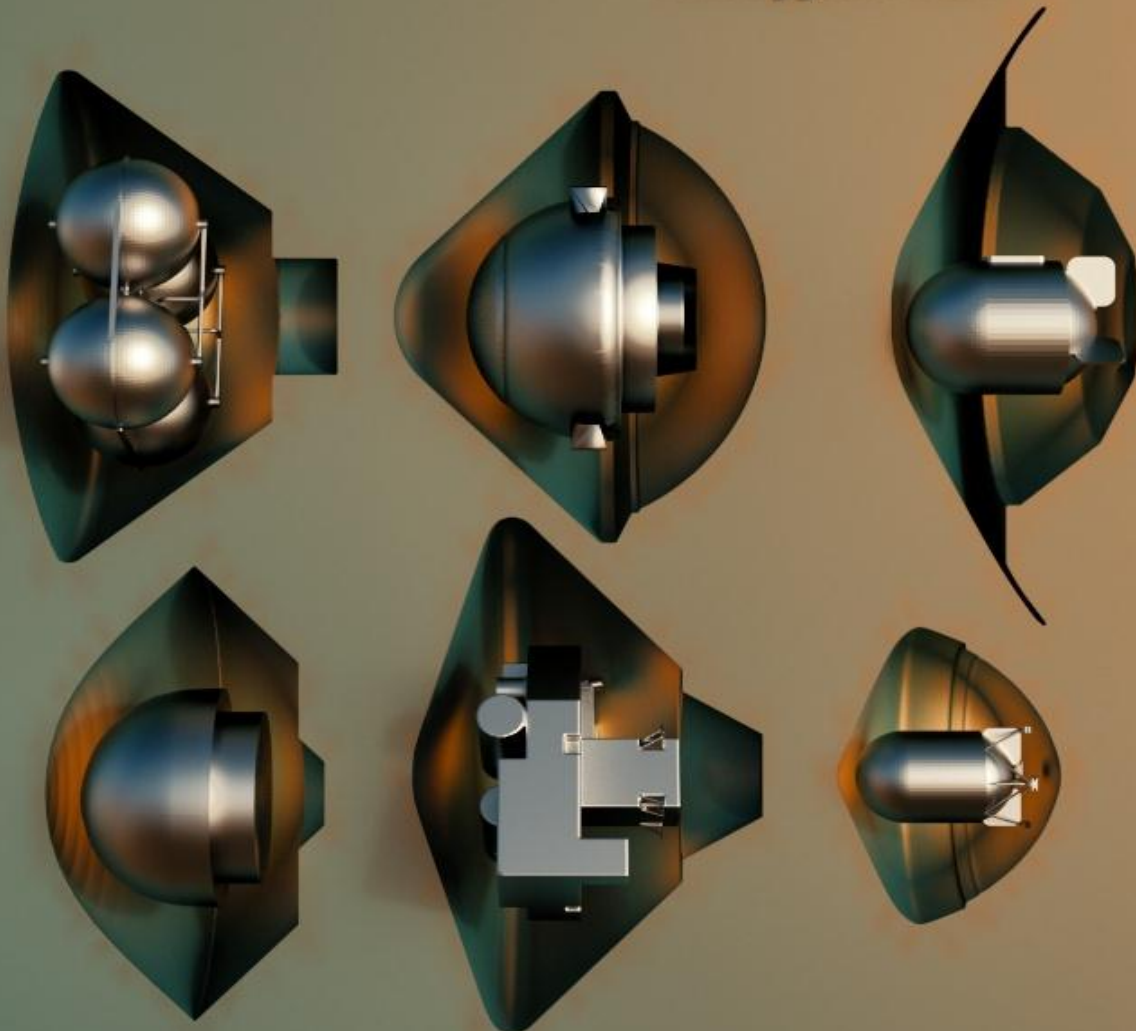
10th INTERNATIONAL PLANETARY PROBE WORKSHOP

San Jose, CA, USA

June 17-21, 2013

Short Course: EDL Systems Overview June 15-16, 2013

www.ippw10.com



Organizing Committees

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Chairs: Stephen Ruffin, Jean-Pierre Lebreton

Members: David Atkinson, David Mimoun, Ravi Deepak, Ricardo Diaz-Silva, Ali Guarneros Luna, Greg Swanson, Blanca Rebollar Trejo

AI Seiff Organizing Committee (ASOC)

Chairs: Michael Wright, David Atkinson

Members: Athena Coustenis, Tibor Balint, Andrew Ball, Bobby Braun, Jean-Pierre Leberton, Ethiraj Venkatapathy



Workshop Schedule

Mon 6/17			Tue 6/18			Wed 6/19			Thurs 6/20			Fri 6/21		
8:30	Reg / Coffee	Section I / F. Pratt, M. Munk (Albert Hall)	8:30	Reg / Coffee	3. Ferner Mier I / R. Green, D. Mison (Engineering Hall)	8:30	Reg / Coffee	4. Gera Plaut / T. Spiller, D. Lohm (Albert Hall)	8:30	Reg / Coffee	7A. X-Ceiling Technologies I: Mierau / D. Buerst, K. Kappert (Albert Hall)	8:30	Reg / Coffee	8. X-Ceiling Technologies IV: Deckerstein and Lambert, Pich / A. Wilsch, A. Sengupta (Albert Hall)
8:30	11A Welcome, SST Welcome and LOC Logistics / P. Papadopoulos		8:30	31 Perez (217)		8:30	41 Breckard (384)		8:30	7A.1 Reberth (112)	7B.1 Lawrence (289)	8:30	9.1 Auer (239)	
8:40	1.1B Introduction B. Brenneck O. Kuvshinov		8:55	3.1 Sathian (189)		8:55	4.1 Prashin (54)		8:55	7A.1 Yamada (714)	7B.2 Sathia (145)	8:55	9.2 Hughes (346)	
8:45	Memoriam Brenda Lamb / E. Voshellperry		9:30	3.3 Lamb (89)		9:30	4.3 Mierau (355)		9:30	7A.3 Sathia (212)	7B.3 Gerdhan (117)	9:30	9.3 Conrad (300)	
8:50	Memoriam Rita Young / J. Curt		9:45	3.4 Zhang (239)		9:45	4.4 Marple (217)		9:45	7A.4 Buerst (389)	7B.4 Mier (306)	9:45	9.4 Dillman (125)	
8:55	1.2 A3 Soft Award / M. Wright		10:10	3.5 Buerst (235)		10:10	4.5 Spiller (370)		10:10	7A.5 Gerdhan (7)	7B.5 Wierschke (340)	10:10	9.5 Brenneck (333)	
9:00	AI Soft Award Acceptance / J. Arnold		10:35	Coffee 10:35 - 11:00		10:35	Coffee 10:35 - 11:00		10:35	Coffee 10:35 - 11:00		10:35	Coffee 10:35 - 11:00	
9:30	AI Soft Award Acceptance / M. Mier		11:00	3.6 Beck (317)		11:00	5. Auerth Becker / A. Cheng, M.C. Perkinson (Albert Hall)		11:00	7A.6 Sathia (212)	7B.6 Fisher (241)	11:00	9.6 Shen (307)	
9:40	1.3 History of EPW / J. P. Lohm		11:25	3.7 Yim Shen (234)		11:25	5.1 Ayedien (167)		11:25	7A.7 Strub (330)	7B.7 Breckard (98)	11:25	9.7 Sengupta (123)	
10:00	1.4 Overview of NASA's Space Tech Meritum Directorate / J. Buerst		11:50	3.8 Kufner (234)		11:50	5.2 Perkinson (107)		11:50	7A.8 Sathian (142)	7B.8 Prowaska (303)	11:50	9.8 Gerd (177)	
10:30	Coffee 10:30 - 11:00					11:50	5.3 Wier (85)		12:15	7A.9 Scherzer (214)	7B.9 Mierbach (369)	12:15	Lunch 12:15 - 12:35	
11:30	1.6 Challenges and Opportunities of The Meritum Space Agency / J. Mierau					12:15	5.4 Buerst (313)		13:05				10. Chong / B. Brenneck, P. Papadopoulos (Albert Hall)	
12:00	1.7 Probe Science: What it has to be like Sun / A. Chongpore					12:40	5.5 Perkinson (106)		13:00	13:05 - 14:30			13:15	The Outlook for U.S. Science and Technology Policy: A Round Discussion EPW, The Next Decade, J. Curt on the Third Rock from the Sun / J. Perkinson (445)
12:30						13:05	Lunch Professional Development 13:05 - 14:30		13:30				13:45	Student Awards / S. Beldin
13:00	Lunch 12:30 - 14:00					13:05	6. Yauer and Tison / R. Sathian, D. Mison (Albert Hall)		14:30	8A. X-Ceiling Technologies II: Trippert, S. GNC, and Sathian / K. Coupland, S. Sengupta (Albert Hall)	8B. X-Ceiling Technologies III: TP5 Technologies / D. Prashin, A. Gerdhan (Albert Hall)	14:00	Panel Discussion EPW: The Next Decade, J. Curt	
13:30						14:30	6.1 Lawrence (217)		14:30	8A.1 Buerst (374)	8B.1 Boudry (31)	14:45	Choosing and Forward, P. Papadopoulos	
	2. Meritum Science Laboratory / C. Sathia, J. Dure (Albert Hall)			Lunch / Field Trip		14:55	6.2 George (230)		14:55	8A.2 Bouquet (26)	8B.2 Coupland (250)	15:00	Adjourn	
14:00	2.1 Sathian (241)					15:30	6.3 Feldman (311)		15:30	8A.3 Sathian (298)	8B.3 Wilder (217)			
14:25	2.2 Chon (137)					15:45	6.4 Rob (48)		15:45	8A.4 Pignier (319)	8B.4 Beck (202)			
14:50	2.3 Dure (350)					16:10	6.5 Lohm (287)		16:10	8A.5 Gerd (176)	8B.5 Gerd (239)			
15:15	2.4 Sath (209)					16:35	Coffee 16:35 - 17:00		16:35	Coffee 16:35 - 17:00				
15:40	2.5 Sathian (310)					17:00	6.6 Carr (208)		17:00	8A.6 Hyde (312)	8B.6 Del Carr (271)			
16:05	Coffee 16:05 - 16:35					17:25	6.7 Prashin (146)		17:25	8A.7 Coupland (384)	8B.7 Dure (280)			
16:35	2.6 Wier (73)					17:50	6.8 Carr (287)		17:50	8A.8 Lohm (210)	8B.8 Sathian (247)			
17:00	2.7 Wier (385)					18:15	6.9 Prashin (290)		18:15	8A.9 Vain (85)	8B.9 Fisher (235)			
17:25	2.8 Sathian (245)					18:40	6.10 Arnold (138)		18:40	End of Session	8B.10 Green (77)			
17:50	2.9 Chon (134)					19:05	End of Session		19:05	End of Session	End of Session			
18:15	2.10 Sathian (300)						Banquet 19:00 - 23:00			Poster Session 19:30 - 21:30				
18:40	End of Session													
	Evening Activity													
	Oral Presentation Student													



Workshop Schedule: Monday 6/17

Morris Dailey

8:00	Reg / Coffee ENGR 285
	Session 1 / F. Ferri, M. Munk (Morris Hall)
8:30	1.1A Welcome: SJSU Welcome and LOC Logistics / P.Papadopolous
8:40	1.1B Introduction/B. Bienstock, O. Karatekin
8:45	Memorium Bernie Laub / E. Venkatapathy
8:50	Memorium Rich Young / J. Cuzzi
8:55	1.2 Al Seiff Award / M. Wright
9:00	Al Seiff Award Acceptance / J. Arnold
9:20	Al Seiff Award Acceptance / M. Marov
9:40	1.3 History of IPPW / J.-P. Lebreton
10:00	1.4 Overview of NASA's Space Tech Mission Directorate / J. Reuther
10:30	Coffee 10:30 - 11:00 ENGR 285
11:30	1.6 Challenges and Opportunities of The Mexican Space Agency / J. Mendieta
12:00	1.7 Probe Science: When it has to be In-Situ / A. Colaprete
12:30	Lunch 12:30 - 14:00 ENGR 285/287
13:00	
13:30	

	2. Mars Science Laboratory / C. Szalai, J. Davis (Morris Hall)
14:00	2.1 Steltzner (241)
14:25	2.2 Chen (137)
14:50	2.3 Davis (350)
15:15	2.4 Sell (209)
15:40	2.5 Serricchio (316)
16:05	Coffee 16:05 - 16:35 ENGR 285
16:35	2.6 Way (273)
17:00	2.7 White (305)
17:25	2.8 Schonenberger (245)
17:50	2.9 Chen (134)
18:15	2.10 Steltzner (800)
18:40	End of Session
	Evening Activity ENGR 285/287

Oral Presentation
Student



8:00	Reg / Coffee ENGR 285	Lunch / Field Trip
	3. Future Mars I / R. Grover, D. Mimoun (Engineering Hall)	
8:30	3.1 Perez (227)	
8:55	3.2 Stehura (189)	
9:20	3.3 Lemke (89)	
9:45	3.4 Zacny (239)	
10:10	3.5 Bonetti (285)	
10:35	Coffee 10:35 - 11:00 ENGR 285	
11:00	3.6 Block (327)	
11:25	3.7 Van Hove (234)	
11:50	3.8 Rafkin (284)	
17:00	Public Lecture Science Museum Rob Manning	Tech Museum



Workshop Schedule: Wednesday 6/19

Morris Dailey

8:00	Reg / Coffee ENGR 285
	4. Giant Planets / T. Spilker, D. Lebleu (Morris Hall)
8:30	4.1 Brockwell (304)
8:55	4.2 Prabhu (54)
9:20	4.3 Mousis (355)
9:45	4.4 Marley (217)
10:10	4.5 Spilker (370)
10:35	Coffee 10:35 - 11:00 ENGR 285
	5. Airless Bodies / A. Cheng, M.-C. Perkinson (Morris Hall)
11:00	5.1 Agnolon (105)
11:25	5.2 Peacocke (107)
11:50	5.3 Witte (85)
12:15	5.4 Roark (313)
12:40	5.5 Perkinson (106)
13:05	Lunch/Professional Development 13:05 - 14:30 ENGR 285

	6. Venus and Titan / R. Lorenz, A. Coustenis (Morris Hall)
14:30	6.1 Lorenz (237)
14:55	6.2 Gorospe (320)
15:20	6.3 Feldman (311)
15:45	6.4 Reh (43)
16:10	6.5 Limaye (267)
16:35	Coffee 16:35 - 17:00 ENGR 285
17:00	6.6 Cutts (208)
17:25	6.7 Polidan (146)
17:50	6.8 Cruz (297)
18:15	6.9 Prabhu (90)
18:40	6.10 Arnold (108)
19:05	End of Session

Banquet 20:00 - 23:00	Montalvo Villa
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Workshop Schedule: Thursday/Morning 6/20

Morris Dailey/ENGR 189

8:00	Reg / Coffee ENGR 285	Reg / Coffee ENGR 285
	7A. X-Cutting Technologies I: Missions / D. Bonetti, K. Edquist (Morris Hall)	7B. Future Mars II / R. Grover, D. Mimoun (Morris Hall)
8:30	7A.1 Rebuffat (112)	7B.1 Lorenzoni (269)
8:55	7A.2 Yamada (274)	7B.2 Szalai (145)
9:20	7A.3 Bailet (232)	7B.3 Geelen (117)
9:45	7A.4 Bonetti (309)	7B.4 Karz (306)
10:10	7A.5 Guelhan (57)	7B.5 Wercinski (340)
10:35	Coffee 10:35 - 11:00 ENGR 285	
11:00	7A.6 Saikia (121)	7B.6 Faber (261)
11:25	7A.7 Straub (330)	7B.7 Buchwald (98)
11:50	7A.8 Savino (142)	7B.8 Peacocke (303)
12:15	7A.9 Sakraker (214)	7B.9 Murbach (369)
13:05	13:05 - 14:30 ENGR 285	
13:00		
13:30		



	8A. X-Cutting Technologies II: Trajectory, GNC, and Simulation / K. Oudrhiri, M. Sorgenfrei (Morris Hall)	8B. X-Cutting Technologies III: TPS Technologies / D. Prabhu, A. Guelhan (Morris Hall)
14:30	8A.1 Reza (374)	8B.1 Bouilly (81)
14:55	8A.2 Bouquet (263)	8B.2 Congdon (250)
15:20	8A.3 Samareh (198)	8B.3 Wilder (317)
15:45	8A.4 Pigneur (319)	8B.4 Beck (202)
16:10	8A.5 Glaab (176)	8B.5 Gasch (229)
16:35	Coffee 16:35 - 17:00 ENGR 285	
17:00	8A.6 Hyde (312)	8B.6 Del Corso (271)
17:25	8A.7 Oudhiri (384)	8B.7 Ellerby (260)
17:50	8A.8 Lugo (210)	8B.8 Stackpoole (247)
18:15	8A.9 Voirin (88)	8B.9 Helber (235)
18:40	End of Session	8B.10 Green (77)
19:05		End of Session

Poster Session 19:30 - 21:30	Tech Museum
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IOC Dinner

8:00	Reg / Coffee	ENGR 285
	9. X-Cutting Technologies IV: Decelerators and Landing Tech / A. Witkowski, A. Sengupta (Morris Hall)	
8:30	9.1 Asmar (289)	
8:55	9.2 Hughes (346)	
9:20	9.3 Cassell (200)	
9:45	9.4 Dillman (135)	
10:10	9.5 Jurewicz (393)	
10:35	Coffee 10:35 - 11:00	ENGR 285
11:00	9.6 Skeen (307)	
11:25	9.7 Sengupta (128)	
11:50	9.8 Glaab (177)	
12:15	Lunch 12:15 - 13:15	ENGR 285

	10. Closing / B. Bienstock, P. Papadoplous (Morris Hall)
13:15	The Outlook for U.S. Science and Technology Policy: A Bumpy Ride on the Third Rock from the Sun / J. Parriott (AAS)
13:45	Student Awards / S. Ruffin
14:00	Panel Discussion IPPW: The Next Decade / J. Cutts
14:30	Plan for IPPW-10 / A. Guelhan
14:45	Closing and Farewell / P. Papadopoulos
15:00	Adjourn



Short Course Agenda

Entry Descent Landing Systems Overview

Saturday, 15 June 2013 (Day 1)

Start Time	No	Topic	Presenter
8:00 AM	1	Gather and Coffee	
8:15 AM	2	Opening Remarks	Aaron Morris
8:30 AM	3	Conceptualizing EDL Systems/Initial Requirements for an EDL System	Adam Steltzner/ Mark Adler
9:15 AM	4	Trajectories and EDL as an Energy Management Problem	Juan Cruz/Michelle Munk
9:45 AM		Coffee Break	
10:00 AM	5	Aerodynamics and Aerothermodynamics of Entry Vehicles	Karl Edquist/ Mike Wright
10:45 AM	6	Planetary Probe Design Software	Jamshid Samareh
11:15 PM – 12:45 PM		Lunch	
12:45 PM	7	Guidance and Control	Rodrigo Haya
1:15 PM	8	Radiative Transfer/Emission and Absorption/Ablation	Lionel Marraffa /Mario Lino De Silva
1:45 PM	9	TPS Fundamentals	Robin Beck
2:30 PM		Coffee Break	
2:45 PM	10	Modern Advances in TPS	Raj Venkatapathy
3:15 PM	11	Modular Honeycomb Packed Polymer Ablative Heatshields	Bill Congdon
3:45 PM	12	Hypersonic Deployable Decelerators	Paul Wercinski
4:15 PM	13	Supersonic Decelerators	Ian Clark/Mark Adler
5:00 PM		Adjourn	



Short Course Agenda

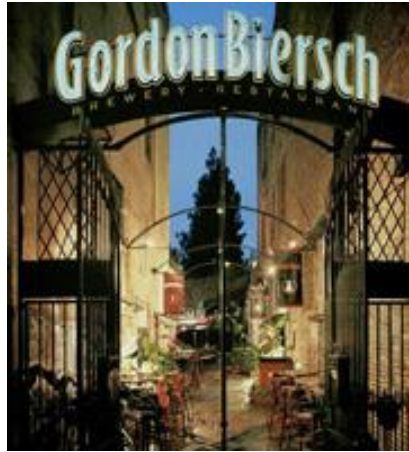
Entry Descent Landing Systems Overview

Sunday, 16 June 2013 (Day 2)

Start Time	No	Topic	Presenter
8:00 AM	1	Continental Breakfast	
8:15 AM	2	Logistics and Opening	Aaron Morris
8:30 AM	3	Hypersonic Inflatable Decelerators	Henry Wright
9:15 AM	4	Capsule Stability During Planetary Re-Entry	Luca Ferracina
10:00 AM	5	Trim Tabs	Karl Edquist
10:20 AM	6	Supersonic Retropropulsion	Karl Edquist
10:40 AM		Coffee Break	
10:50 AM	7	An Historic Overview of Parachute Design and Construction for Planetary Probes	Al Witkowski
11:20 AM	8	Parachute and Softgoods Analysis Techniques	Ben Tutt
11:45 AM-1:15 PM		Lunch	
1:15 PM	9	CPAS Parachute Testing, Model Development, & Verification	Leah Romero
1:45 PM	10	NASA EDL Repository	Elmain Martinez
2:05 PM	11	Landing System Design	Tom Rivellini/Mark Adler/Adam Steltzner
2:35 PM		Coffee Break	
2:45 PM	12	Case Studies of Recent US EDL Technology Achievements	Tom Rivellini/Mark Adler/Adam Steltzner
3:30 PM	13	Case Studies of European EDL Technology	Steve Lingard and Luca Ferracina
4:15 PM	14	Reserved for overflow	
5:00 PM		Adjourn	



Student Social – Sunday 6/16

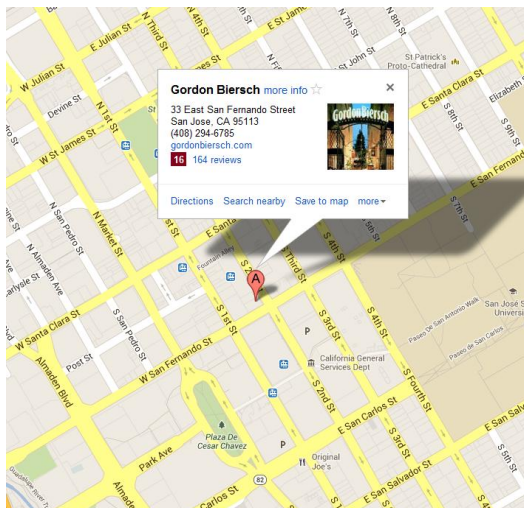


WHAT

- Relaxed and casual attire gathering of all of the IPPW-10 students to kick off the IPPW-10 Workshop. Come eat, drink, and meet the other students at the workshop.
- Food will be provided by the generous support of the IPPW-10 Sponsors
- Alcoholic drinks (if desired) must be purchased by guest.

WHERE

- Gordon Biersch Brewery and Restaurant
- 33 East San Fernando St., San Jose, CA 95113 Phone: 408-294-6785
- <http://www.gordonbiersch.com/locations/san-jose?action=view>



WHEN

- Sunday, June 16, 2013
- 7:00pm-9:00pm
- In private dining room



NASA Ames Research Center Tour – Tuesday 6/18

NASA Ames Research Center, located at Moffett Field, California, was founded Dec. 20, 1939 as an aircraft research laboratory by the National Advisory Committee for Aeronautics (NACA) and in 1958 it became part of the National Aeronautics and Space Administration.

Ames Research Center, one of 10 NASA field installations, is located in the heart of California's Silicon Valley at the core of the research cluster of high-tech companies, universities and laboratories that define the region's character. With over \$3.0 billion in capital equipment, 2,300 research personnel and a \$600 million annual budget, Ames' economic impact is significant. Ames plays a critical role in virtually all NASA missions in support of America's space and aeronautics programs.



As a leader in information technology research with a focus on supercomputing, networking and intelligent systems, Ames conducts the critical R&D and develops the enabling technologies that make NASA missions possible. Ames also is a leader in nanotechnology, fundamental space biology, biotechnology, aerospace and thermal protection systems, and human factors research. Ames research in astrobiology focuses on the effects of gravity on living things, and the nature and distribution of stars, planets and life in the universe.

In addition, Ames works collaboratively with the FAA, conducting research in air traffic management to make safer, cheaper and more efficient air travel a reality. Ames engages in information and education outreach, forms collaborative partnerships, and fosters commercial application of NASA technologies. Ames is developing NASA Research Park, an integrated, dynamic research and education community created to cultivate diverse partnerships with academia, industry and non-profit organizations in support of NASA's mission.



Intel Museum Tour – Tuesday 6/18



Go behind the scenes in the high-tech world of California's famed Silicon Valley. See what it's like inside an ultra-clean, highly automated silicon chip factory, and connect with technologies that give us new ways to work, learn, play, and communicate. The Intel Museum is 10,000 square feet of fun, interactive learning for children and adults.

Getting there: The museum is conveniently located near the Montague Expressway exit off Highway 101 in Santa Clara:

The Intel Museum and Intel Museum Store
Robert Noyce Building
2200 Mission College Boulevard
Santa Clara, CA 95054
408-765-5050



IPPW Banquet Keynote Speaker - Wednesday 6/19

Dr. S. Pete Worden

Director, NASA Ames Research Center

Dr. S. Pete Worden (Brig. Gen., USAF, ret.) is the NASA Ames Research Center Director. Prior to becoming Director, Dr. Worden was a Research Professor of Astronomy, Optical Sciences and Planetary Sciences at the University of Arizona where his primary research direction was the development of large space optics for national security and scientific purposes and near-earth asteroids. Additionally he worked on topics related to space exploration and solar-type activity in nearby stars. He is a recognized expert on space issues—both civil and military. Dr. Worden has authored or co-authored more than 150 scientific technical papers in astrophysics, space sciences, and strategic studies. Moreover, he served as a scientific co-investigator for two NASA space science missions.



In addition to his former position with the University of Arizona, Dr. Worden served as a consultant to the Defense Advanced Research Projects Agency (DARPA) on space-related issues. During the 2004 Congressional Session Dr. Worden worked as a Congressional Fellow with the Office of Senator Sam Brownback (R-KS), where he served as Senator Brownback's chief advisor on NASA and space issues.

Dr. Worden retired in 2004 after 29 years of active service in the United States Air Force. His final position was Director of Development and Transformation, Space and Missile Systems Center, Air Force Space Command, Los Angeles Air Force Base, CA. In this position he was responsible for developing new directions for Air Force Space Command programs and was instrumental in initiating a major Responsive Space Program designed to produce space systems and launchers capable of tailored military effects on timescales of hours.

Dr. Worden was commissioned in 1971 after receiving a Bachelor of Science degree from the University of Michigan. He entered the Air Force in 1975 after graduating from the University of Arizona with a doctorate in astronomy. Throughout the 1980s and early 1990s, Dr. Worden served in every phase of development, international negotiations and implementation of the Strategic Defense Initiative, a primary component in ending the Cold War. He twice served in the Executive Office of the President. As the staff officer for initiatives in the George Bush administration's National Space Council, Dr. Worden spearheaded efforts to revitalize U.S. civil space exploration and earth monitoring programs.

Dr. Worden commanded the 50th Space Wing that is responsible for more than 60 Department of Defense satellites and more than 6,000 people at 23 worldwide locations. He then served as Deputy Director for Requirements at Headquarters Air Force Space Command, as well as the Deputy Director for Command and Control with the Office of the Deputy Chief of Staff for Air and Space Operations at Air Force headquarters. Prior to assuming his current position, Dr. Worden was responsible for policy and direction of five mission areas: force enhancement, space support, space control, force application and computer network defense.

Dr. Worden has written or co-written more than 150 scientific technical papers in astrophysics, space sciences and strategic studies. He was a scientific co-investigator for two NASA space science missions. He and his wife Nancy reside in Placitas, New Mexico.



The Tech Museum of Innovation IPPW10 Exhibit

June 14th – July 7th



Planetary Probes – Going where no man has gone - yet

Join us for a fascinating exhibit at The Tech Museum of Innovation featuring artifacts and models of current and previous spacecraft missions from NASA Ames Research Center in Moffett Field, CA. The exhibit will be hosted in conjunction with the 10th International Planetary Probe Workshop co-hosted at San Jose State University and NASA Ames. See a full-size mock up of the Galileo probe (which entered Jupiter's atmosphere in 1995), test models from NASA Ames's Arc-Jet and Hypervelocity Free-Flight Facility, models of future satellites, and much more!



**The Challenges of Going to Mars:
Mars Science Laboratory
Presented by Rob Manning at
Tech Museum – Tuesday 6/18 5p.m**

Since landing on Aug 5 2012, Curiosity rover has been exploring Mars' deep past for evidence for early habitability and has just begun its hunt for signs of past organics. This remarkable mission has already drawn tentative conclusions that long ago, the floor of Gale crater was indeed habitable for certain classes of microorganisms had they been present. The development of MSL was a mix of innovation riddled with problems that required long hard work and perseverance. This talk will describe a few of the thousands of challenges that had to be won to get to where Curiosity is today.



Biography of Rob Manning

Rob Manning is the Chief Engineer for the Mars Science Laboratory (MSL) Project that successfully landed Curiosity Rover on Mars on August 5, 2012. Rob was responsible for ensuring that the design, the test program and the team, working together, would result in a mission that would work. An Engineering Fellow at JPL, Rob has been designing, testing and operating spacecraft for 32 years.

In the 1990's, Rob was the Mars Pathfinder Chief Engineer where he led the Entry Descent and Landing (EDL) team. After successfully landing and operating the first airbag lander and rover on another planet, he co-conspired the idea to modify the Pathfinder and Sojourner Rover designs to become the Mars Exploration Rovers (MER), Spirit and Opportunity. On MER he led the system engineering team as well as the EDL team.

After MER he became the Mars Program Chief Engineer where he helped plan and integrate the various Mars missions like Phoenix and Mars Reconnaissance Orbiter as well as plan for MSL and beyond. As a result of his luck at JPL, Rob has received two NASA medals and is in the Aviation Week Magazine Space Laureate Hall of Fame in the Smithsonian Air and Space Museum. In 2004, SpaceNews magazine named Rob as one of 100 people who made a difference in civil, commercial and military space since 1989.

Rob is a graduate of Caltech and Whitman College where he studied math, physics, computer science, and control systems. He makes his home in La Canada with his wife Dominique and their daughter, Caline.



Banquet at Montalvo Villa – Wednesday 6/19



The IPPW 10 banquet dinner will be held in the Montalvo villa on Wednesday evening beginning at 6:00 pm and continuing until 9:00 pm. The Montalvo villa is located at 15400 Montalvo Rd in Saratoga CA 95071.

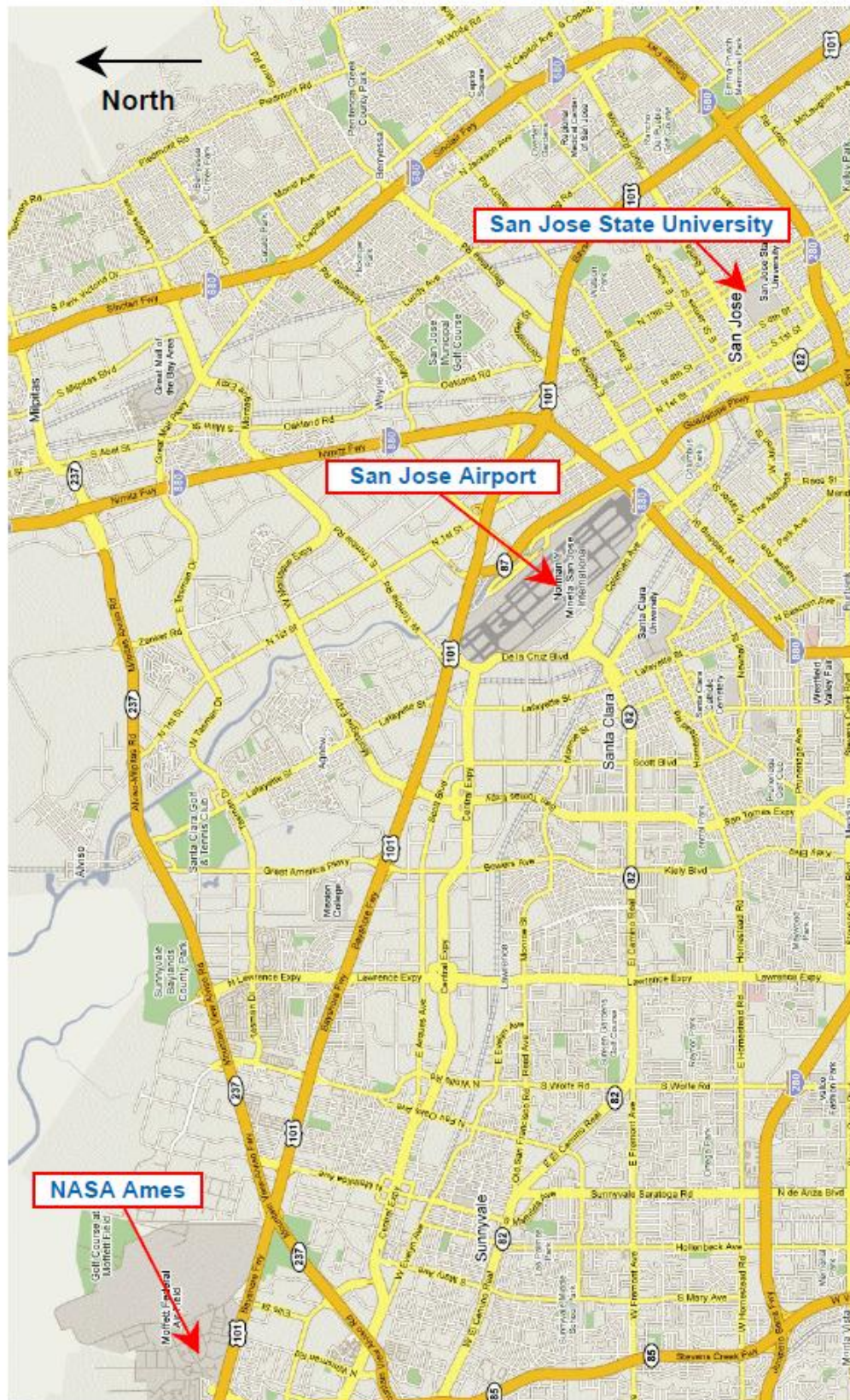
A reception with soft drinks, wine and beer will start at 6:00 pm. Dinner will begin at 7:00 pm.

Our special keynote speaker will be Dr. S. Pete Worden, Director of the NASA Ames Research Center.



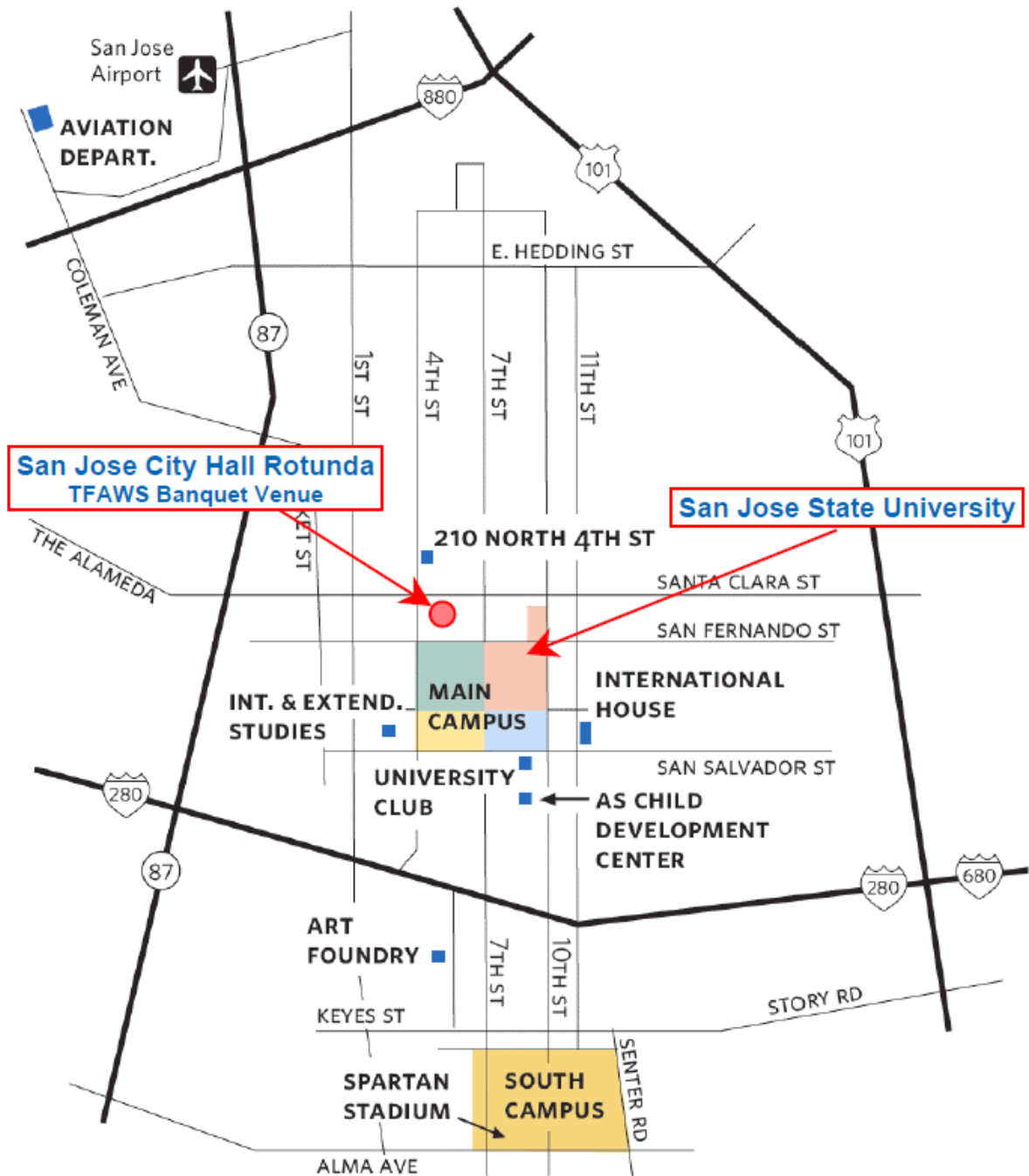
Maps

Regional San Jose Area



Maps

Local San Jose Area



Maps

Main Campus Map



EVENT LOCATIONS

IPPW will be held in the Morris Dailey Auditorium and Engineering building. Check-in, registration will be held in front of the Engineering auditorium room 189. Posters will be delivered at the registration location and displayed in the lobby and corridor of the Engineering building. The short course will take place on Saturday and Sunday at the Engineering building's room 285/287. The conference will be held at the Morris Dailey auditorium on Monday, Wednesday, Thursday and Friday. On Tuesday the conference will be held at the Engineering building's auditorium room 189. The Monday special event will be held at the Engineering building's room 285/287. All food services will be provided in the Engineering building's room 285/287.

Engineering Building

Registration (rm 189)
Short course (rm 285/287)
Breakfast/Lunch Dinner/Coffee Breaks (rm 285/287)
Monday Evening Special Event (rm 285/287)
Conference held on premises on Tuesday

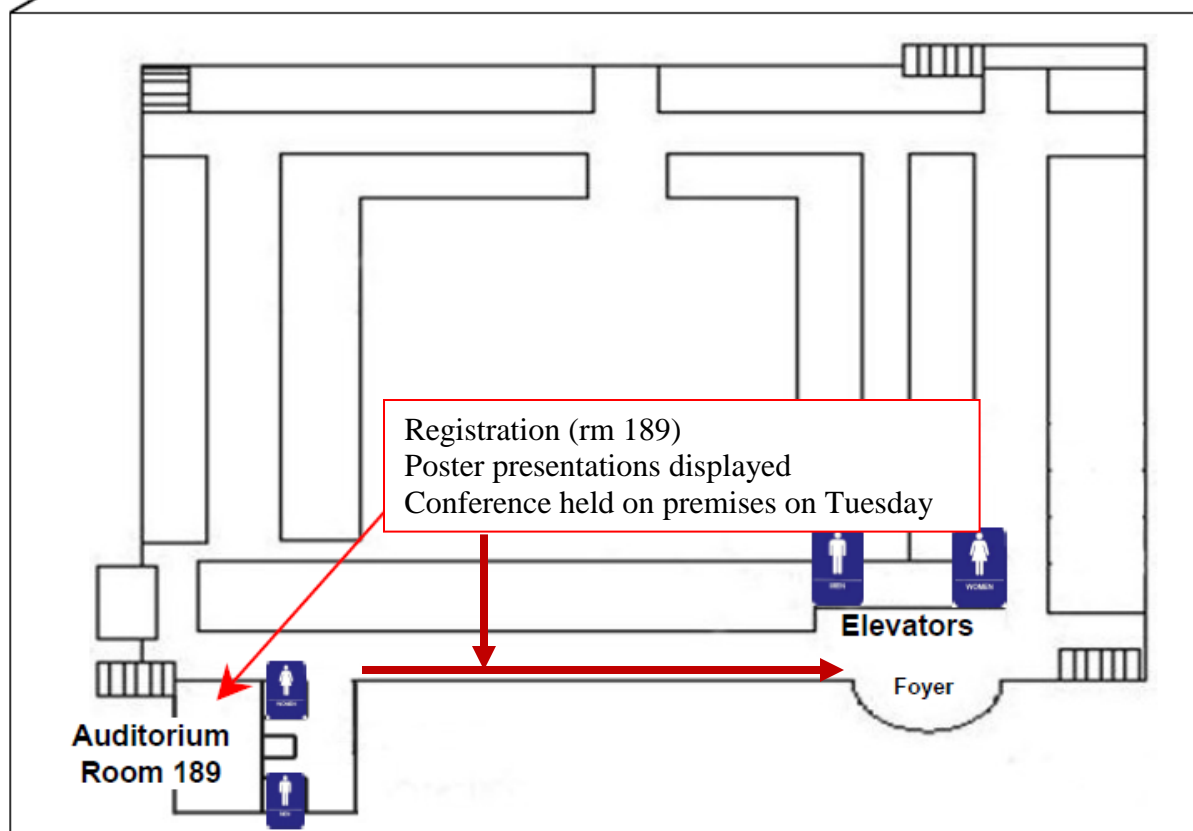
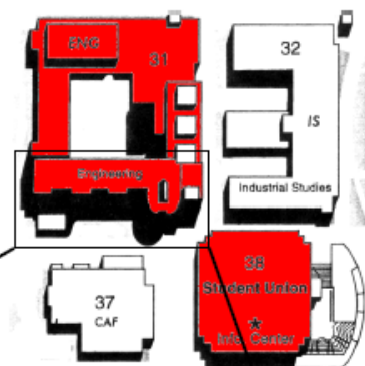
Morris Dailey

Conference held on premises on Monday,
Wednesday, Thursday and Friday



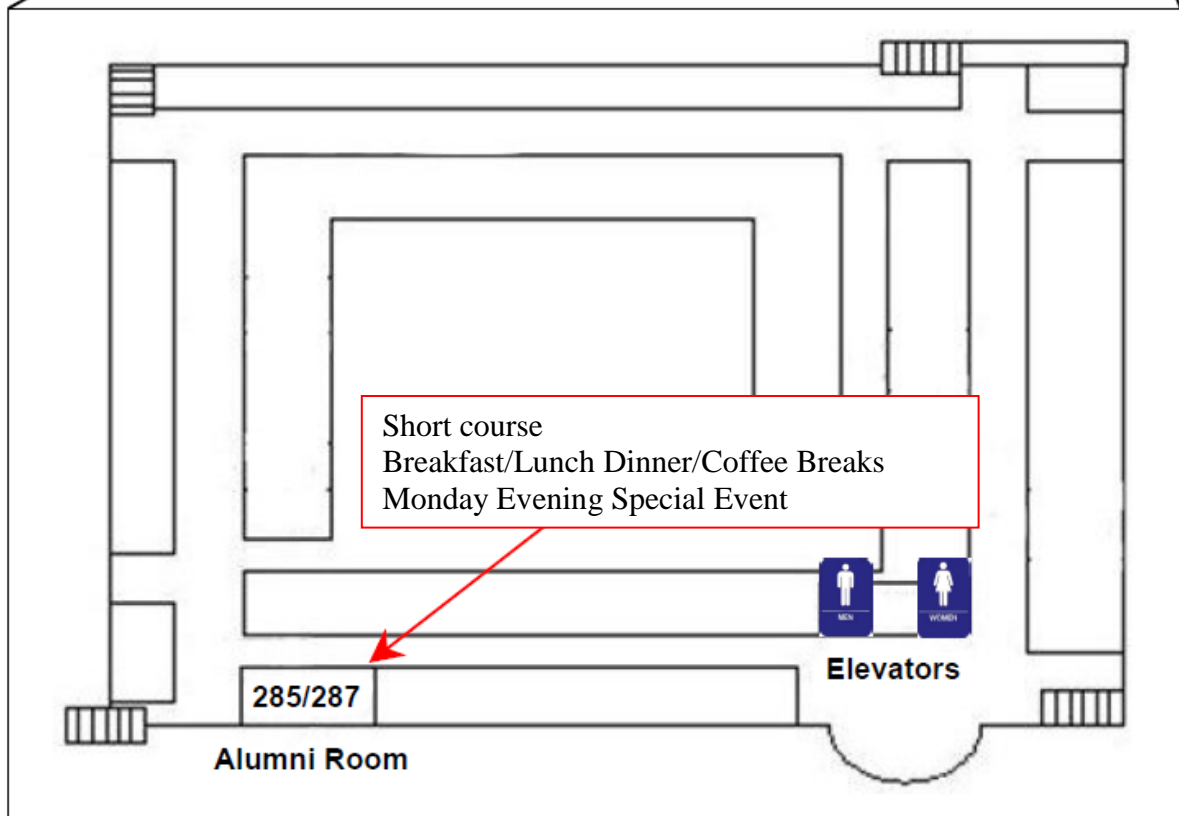
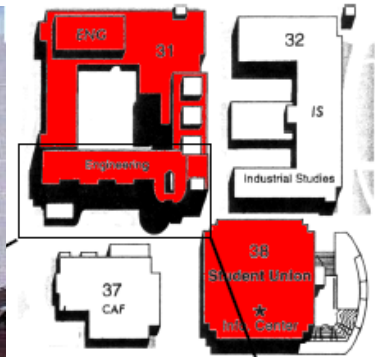
Maps

Engineering Building – First Floor



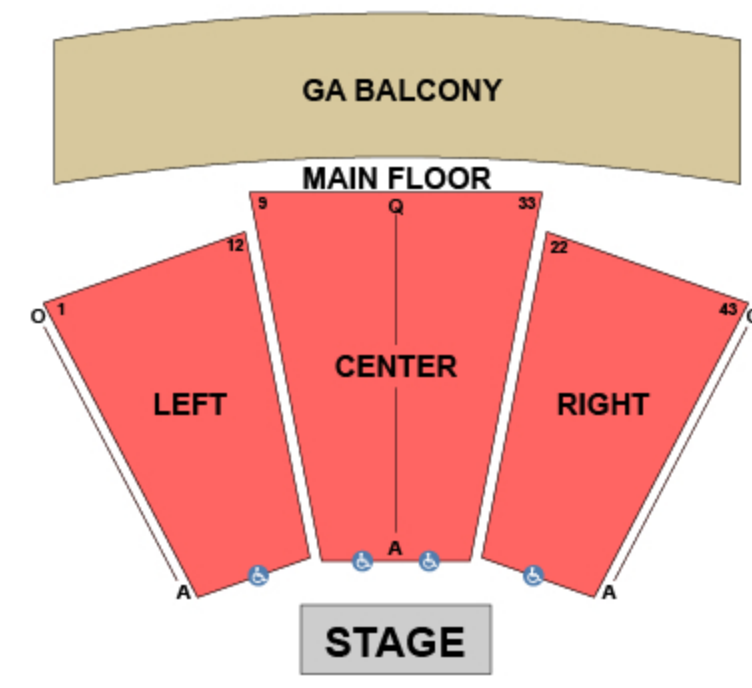
Maps

Engineering Building – Second Floor



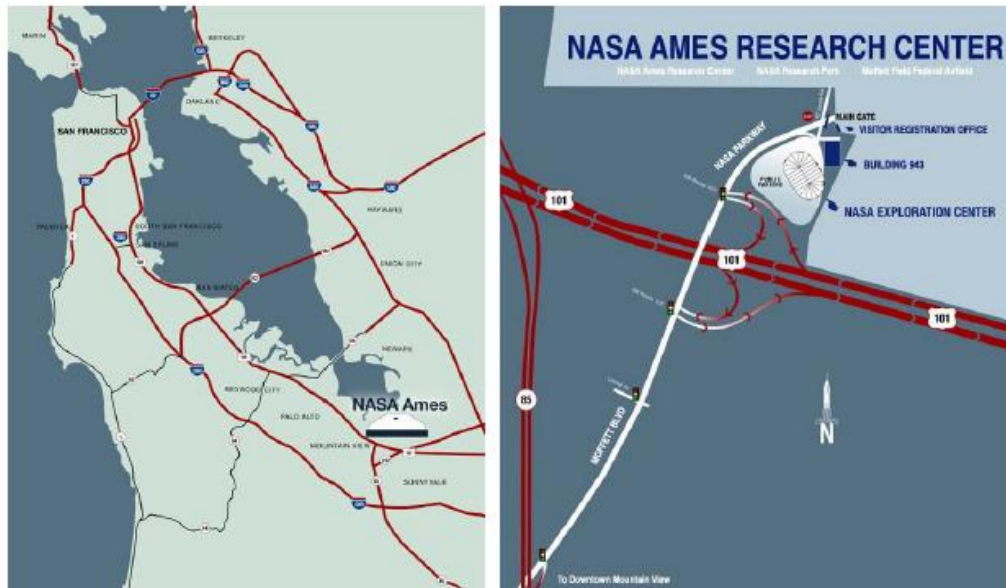
Maps

Morris Dailey Auditorium



Maps

NASA Ames Research Center



Driving Directions

From San Jose State University:

1. Head southeast on either 4th street or 10th street
2. Take the ramp onto I-280 North
3. Take the exit onto CA-87 N/Guadalupe Pkwy
4. Take exit 9B on the left to merge onto US-101 N toward San Francisco
5. Take exit 398 for Moffett Blvd toward NASA Pkwy
6. Turn right at the traffic light onto Moffett Blvd
7. Proceed to the main gate (the Exploration Center will be on your right, just before the main gate)
8. The guard will direct you to either badging, parking or your destination in the NASA Research Park. Be prepared to show a driver's license to proceed into the NASA Research Park.







Handwriting practice lines consisting of alternating light blue and light gray horizontal lines.



